



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,849	10/03/2005	Rune Ivar Haug	037960.003	6185

7590 09/08/2008
Jeffrey S Whittle
Bracewell & Giuliani
PO Box 61389
Houston, TX 77208-1389

EXAMINER

RIVELL, JOHN A

ART UNIT	PAPER NUMBER
----------	--------------

3753

MAIL DATE	DELIVERY MODE
-----------	---------------

09/08/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,849	Applicant(s) HAUG, RUNE IVAR	
	Examiner JOHN RIVELL	Art Unit 3753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/3/05 (application).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10032005</u> . | 6) <input type="checkbox"/> Other: _____ |

Claims 1-6 are pending.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "15" has been used to designate both a "slide" (moving; see fig. 2) and a fixed element in figure 1.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Benoit (U. S. Pat. No. 2,586,144) in view of Delcroix (U. S. Pat. No. 5,437,304).

The patent to Benoit discloses a "... valve for controlling the distribution of a... of pumpable materials, comprising: a stationary disk (plate 10); a slide (29) arranged for movement between different positions on the stationary disk (10); a slide moving means

(4) connected to the slide (29); the slide (29) having a (single) outlet... (49) in a row; (the) outlet opening (49) having a protruding tubular connection element (26) on a downstream side of the slide (29); each of the tubular connection elements (26) having a free end for releasable connection to a conduit (20); the stationary disk (10) having at least two parallel rows of openings (41) corresponding to the row of outlet openings (45) of the slide (29); a tubular inlet element (11, 12) connected to each opening (41) on a reverse, upstream side of the stationary disk (10); and each row of openings in the stationary disk (10) being arranged perpendicularly to the direction of movement of the slide (29)" as recited in claim 1.

Thus the patent to Benoit discloses all the claimed features with the exception of having a plurality of valve devices arranged so as to form a plurality of rows of outlets, each device having the respective plate 29 connected to the next adjacent plate 29 so as to be operated simultaneously, forming a device controlling the flow of a plurality of independent fluid lines each between a single connection, such as at 6 of Benoit and a plurality of connections, such as at 11 and 12 of Benoit.

The patent to Delcroix discloses that it is known in the art to employ a plurality of valve devices, such as at independent valves 5 and 6, located adjacent to one another with their respective valve heads, at 12 and 24 mechanically connected to each other so as to be moved simultaneously by a single actuator, 31, for the purpose of forming a valve device that controls the flow of independent fluid lines between a single connection, such as at 11, 20 of Delcroix, and a plurality of connections, such as at 9, 10 and 11, 12 by utilizing a multiple arrangement of the same unitary valve.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Benoit a plurality of duplicate valve devices of Benoit with their respective valve heads at slide 29 mechanically connected to each

other so as to be moved simultaneously, for the purpose of forming a valve device that controls the flow of independent fluid lines between a single connection, such as at 6 of Benoit, and a plurality of connections, such as at 11, 12 of Benoit by utilizing a multiple arrangement of the same unitary valve as recognized by Delcroix.

Regarding claim 2, in the device of the combination, “the number of rows of inlet openings (such as at the plurality of openings at 11, 12, as duplicated) are 2-4, while the number of rows of outlet openings (the slide 29 would be connected to, as duplicated) are 1-2” as recited.

Regarding claim 3, in the device of the combination, to space “the axial distance between the rows of the stationary disk (to be) at least twice the diameter of the openings” would have been an obvious matter of design choice to do, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Clearly in Benoit, there is a certain “size” of spacing between the openings 41, as duplicated to form “rows”. To assert a certain size, without establishing the criticality of such dimension, is certainly no more than a change in size relative to Benoit, as modified.

Regarding claim 5, in the device of the combination, “the slide (29) has parallel side edges perpendicular to the row of outlet openings (41), engaging two parallel guides (formed by plate 10, plate 35 and closure 37 on opposite sides of the slide 29), each adjoining an edge for guiding the movement of the slide (29 on the carrier (10)” as recited.

Regarding claim 6, in the device of the combination, “at least two carrier units (read on any two sections of the top and bottom guide as defined above are) on each side edge of the slide (29) to movably engage the guides” as recited.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Benoit (U. S. Pat. No. 2,586,144) in view of Delcroix (U. S. Pat. No. 5,437,304) as applied to claims 1-3, 5 and 6 above, further in view of McKinnis (U. S. Pat. No. 6,145,247).

The patent to Benoit, as modified by Delcroix, discloses all the claimed features with the exception of having "each opening of the carrier... surrounded by an annular groove facing the slide, an annular gasket member being inserted into each groove."

The patent to McKinnis discloses that it is known in the art to employ in a fluid diverter valve device in the fixed portion at body 24 a groove receiving seals 62, mating with a surface of the moving valve element 44 for the purpose of perfecting fluid tight closure between the cooperating moving and fixed surfaces.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Benoit, as modified by Delcroix, a groove in plate 10 about each opening 41 in plate(s) 10) receiving a separate seal therein for the purpose of perfecting fluid tight closure between the cooperating moving and fixed surfaces of the valve element(s) as recognized by McKinnis.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN RIVELL whose telephone number is (571)272-4918. The examiner can normally be reached on Mon.-Fri. from 6:00am-2:30pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571) 272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3753

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/John Rivell/
John Rivell
Primary Examiner
Art Unit 3753**

j.r.